Flowcharts

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ScientificMath

+baseNum: double
+mode: String
+savedAnswer: double
+displayMode: String

+ScientificMath: Constructor

+sine(): void
+cosine(): void
+tan(): void
+inverseSine(): void
+inverseCos(): void
+inverseTan( ): void
+log(): void
+inverseLog(): void
+naturalLog(): void
+inverseNaturalLog() void
+factorial(): void
+switchUnitModes(): void
+switchUnitModes(String s):void
+setBaseNum(double x): void
+convertToRadian(double x): double
+getBaseNum(): double
+printAnswer(): void
+setSavedAnswer(): void
+clearSavedAnswer(): void
+getSavedAnswer(): double
+swapSavedNumber(): void
+switchDisplayMode(): void
+switchDisplayMode(String input): void

Console

+ baseNum:int = 0
+ operatorNum:int = 0
+ answer: int = 0
+doubleAnswer: double = 0.0
+doubleBaseNum: double
+doubleOperatorNum: double

+ Console(): Constructor

+ startup():returnType
+runScientificMath(): void
+runBasicMath(): void
+ clearAnswer():void
+setBaseNum(): void
+ setOperatorNum(): void
+setAnswer(int x): void
+setDoubleBaseNum(double x): void
+setDoubleOperatorNum(double x): void
+setDoubleAnswer(double x): void

MainApplication

0..12

0..*

0..*

BasicMath

+addNum(int x, int y): int
+subNum(int x, int y): int
+multNum(intx, int y): int
+divNum(doublex, doubley): double
+sqrNum(int x, int y): int
+sqrRootNum(double x): double
+expNum(int x, int y): double
+inverseNum(double x): double
+invertNum(int x): int
+getPercentage(double x, double y): double